Abstract

A control circuit and methods for controlling gas valves via a relay are provided. In one illustrative embodiment, a control circuit includes or is connected to a relay that controls the opening and/or closing of a gas valve. The control circuit may also include a failsafe or circuit that has at least one input that can be connected to a control device and at least one output that can be connected to the relay. In some cases, the fail-safe circuit may only supply an output voltage and/or current to the replay for opening the gas valve if the input signal received from the control device includes at least two different successively applied frequency signals. Other methods and embodiments are also contemplated.